

Date: Tuesday, 7/24/2007 12:40:00 PM
 User: Kim Johnston

Process Sheet

31

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : A119 BUBBLE WINDOW ASSY
 Job Number : 33725
 Estimate Number : 12914
 P.O. Number : N/A Part Number : D119755014
 This Issue : 7/24/2007 S.O. No. : N/A Drawing Number : D3624 UNDER REVIEW OK 6/27/24
 Prsht Rev. : NC Project Number : N/A
 First Issue : N/A Type : THERMOFORMING Drawing Revision : C
 Previous Run : 33247 Material : N/A
 Due Date : 7/31/2007 Qty: 1 Um: Each
 Written By :
 Checked & Approved By : 07.07.24
 Comment : Est A New Issue 6/28/2007 DL

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile & type labels per PPP 119-755-014 CHG 001

KS 07.07.24 (1)

2.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

3.0 33725A A119 BUBBLE WINDOW



Comment: Sub-Component A119 BUBBLE WINDOW

B 33725A

4.0 D2126 Seal



Comment: Qty.: 7.4372 f(s)/Unit Total : 7.4372 f(s)

Seal

Batch# B32619

5.0 QC4 INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

6.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D119-755-014

Location:

PPP Rev:

DART

07/27/24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: D Date: 01/09/04
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 7/24/2007 12:40:01 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: A119 BUBBLE WINDOW ASSY

Job Number: 33725

Part Number: D119755014

Job Number:



Seq. #:

Machine Or Operation:

Description :

7.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

①
R 07/24/24

Job Completion



u 07.57.21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

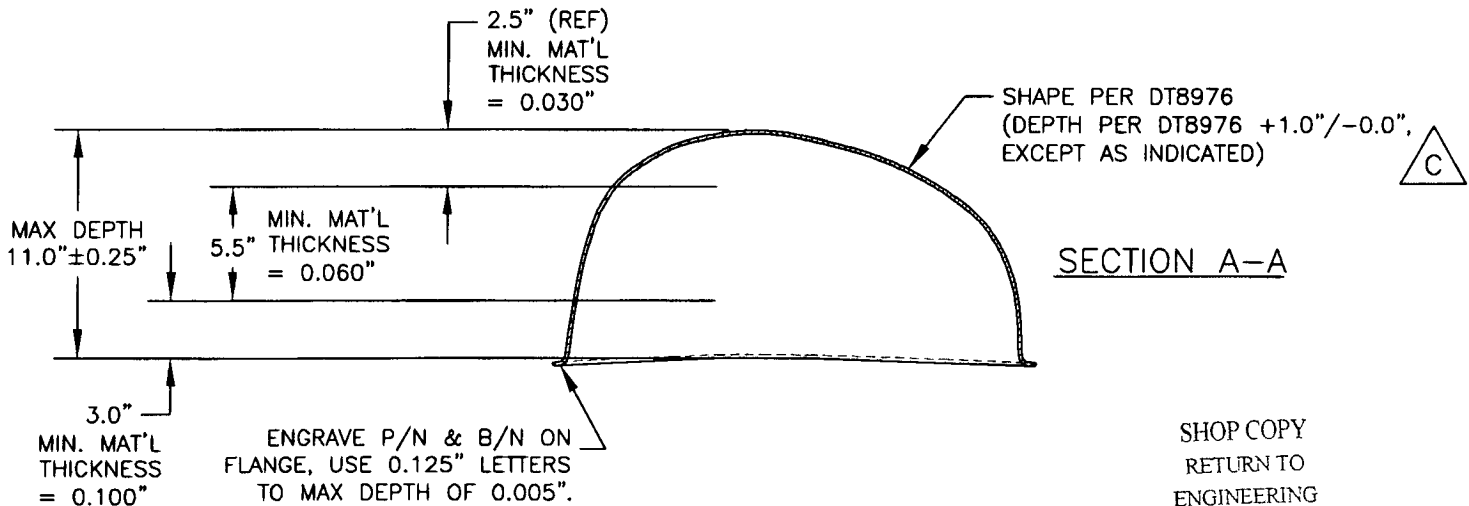
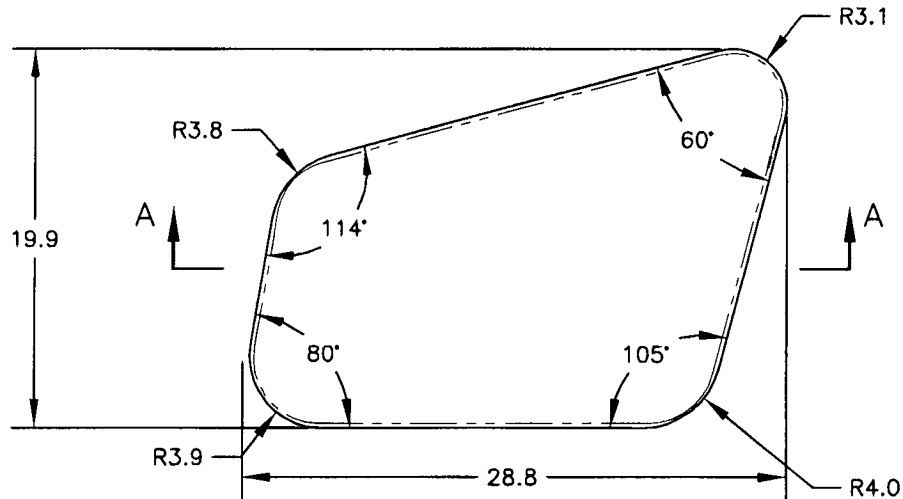
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN qp	DRAWN BY qp	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED H	APPROVED H	DRAWING NO. D3624	REV. C SHEET 1 OF 1
DATE 07.06.27		TITLE BUBBLE WINDOW (A119)	SCALE 1:10
A	07.05.14	NEW ISSUE	
B	07.05.24	11.0" DEPTH WAS 12.0"	
C	07.06.27	ADD TOOL TO CONTROL BUBBLE SHAPE	

RELEASED
07.06.28 H



D3624-2 BUBBLE WINDOW

1) MATERIAL: POLYCAST II CLEAR ACRYLIC OR PLEXIGLAS "G" CAST ACRYLIC, 0.177" THICK (REF DART SPEC. M-ACRYLIC-S.177)

2) FORM PER DT8953

- FORMING PROCESS:
- (a) DRAPE MAT'L OVER DT8953 MOLD
 - (b) HEAT TO 286°F
 - (c) VACUUM TO SPECIFIED HEIGHT
 - (d) LEAVE FOR AT 2 MINUTES TO COOL
 - (e) TRIM WINDOW PER DT8954

3) ALL DIMENSIONS ARE IN INCHES

4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE

WORK ORDER
NO. 33725

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Date: Tuesday, 7/24/2007 12:40:02 PM
User: Kim Johnston

Process Sheet

31

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : A119 BUBBLE WINDOW	
Job Number : 33725A		
Estimate Number : 12911		
P.O. Number : <i>N/A</i>	Part Number : D36242	
This Issue : 7/24/2007 S.O. No. : <i>N/A</i>	Drawing Number : D3624 UNDER REVIEW	<i>OK 07.07.24</i> <i>ENG Approval</i> <i>Res'd.</i>
Prsht Rev. : NC	Project Number : N/A	
First Issue : <i>N/A</i> Type : THERMOFORMING	Drawing Revision : REV. C	
Previous Run : 33247A	Material : <i>N/A</i>	
Written By : <i>[Signature]</i>	Due Date : 7/31/2007	Qty: 1 Um: Each
Checked & Approved By : <i>[Signature]</i>		
Comment : Est. A Thermoform in house 6/27/2007 DL		
Est B. Revised due to corrupt operating Program. 7/23/2007 DL		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	MACRYLICS177	0.177" PLEXIGLAS G CLEAR CAST ACRYLIC SH
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Comment: Qty.: 10.0000 sf(s)/Unit Total : 10.0000 sf(s)
0.177" PLEXIGLAS G CLEAR CAST ACRYLIC SH

1) Batch # *M105075*

2.0	HAND FINISH TH	HAND FINISHING THERMOFORMING
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Comment: HAND FINISHING THERMOFORMING

1) Cut Blanks to 30" by 48"

07.07.24 [Signature]

3.0	THERMOFORMING	THERMOFORMING MACHINE
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Comment: THERMOFORMING MACHINE

Thermoform as per Dwg. D3624 and Folio FTA 004

Dwg. Rev. *C*Folio Rev. *B**07.07.24 [Signature]*

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

1) Check Surface finish for undesired marks, voids, dimples etc. ✓

07.07.24 [Signature]

2) Check depth of bubble to ensure conformity to drawing tolerances. ✓

07.07.24 [Signature]

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Date: Tuesday, 7/24/2007 12:40:02 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: A119 BUBBLE WINDOW

Job Number: 33725A

Part Number: D36242

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

HAND FINISH TH

HAND FINISHING THERMOFORMING



Comment: HAND FINISHING THERMOFORMING

1) Trim to Finished Dimensions ✓

07.07.24 GH.

6.0

QC1

INSPECT ALL DIM TO DIM SHEET



Comment: INSPECT ALL DIM TO DIM SHEET ✓

07.07.24 GH.

7.0

HAND FINISH TH

HAND FINISHING THERMOFORMING



Comment: HAND FINISHING THERMOFORMING

1) Sand and Polish out any mould marks and/or blemishes ✓

07.07.24 GH.

8.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

1) Visually inspect for clarity, and proper formation.

**ENGINEERING
APPROVAL**

BASED ON DS approval
OK of M105075/33247A
07.07.24

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

W 33725

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

①
07.07.24

Job Completion



W 07.07.24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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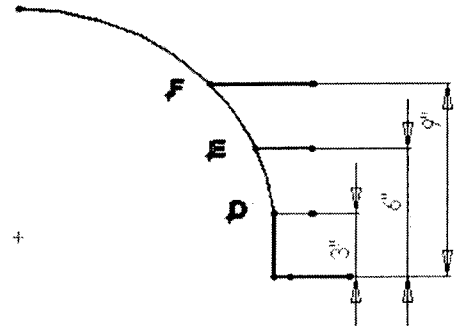
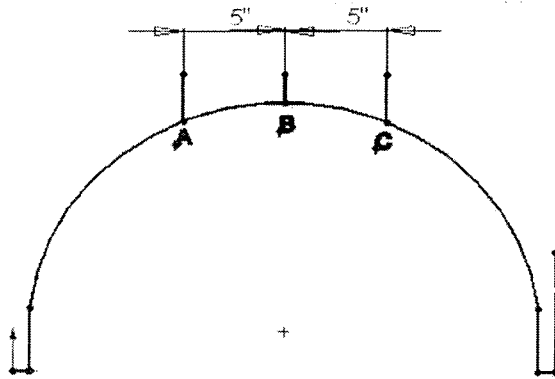
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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NOTE: Date & initial all entries

DART

D3624-2 DIM SHEET



	(2)	TEST FLIGHT(REF)	RETURN (REF)
A	056	0.051	0.078
B	048	0.034	0.058
C	059	0.038	0.039
D	094	0.095	0.06
E	068	0.082	0.052
F	061	0.065	0.059